

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2005/011886A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04J14/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04J H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/055111 A (NOKIA CORPORATION; TERVONEN, ARI; HIIRONEN, OLLI-PEKKA) 3 July 2003 (2003-07-03) page 1, line 5 - line 12 page 11, line 26 - page 17, line 7	1-22
X	EP 0 782 285 A (AT&T CORP) 2 July 1997 (1997-07-02) column 1, line 7 - line 10 column 3, line 3 - line 14 column 3, line 24 - column 4, line 19 column 6, line 8 - column 11, line 16	1-22
A	EP 0 938 205 A (JDS FITEL INC) 25 August 1999 (1999-08-25) paragraph '0001! paragraph '0029! ----- -/--	2,3, 11-14

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

28 July 2005

Date of mailing of the international search report

04/08/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Alonso Martin, M.E.

BEST AVAILABLE COPY

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2005/011886

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EP 1 388 963 A (CHOI, JUN-KOOK) 11 February 2004 (2004-02-11) paragraph '0001! paragraph '0084! - paragraph '0089! -----</p>	15, 16

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US2005/011886

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03055111	A	03-07-2003	AU 2002366915 A1	09-07-2003
			EP 1464131 A1	06-10-2004
			WO 03055111 A1	03-07-2003
			US 2005036785 A1	17-02-2005
EP 0782285	A	02-07-1997	US 5808764 A	15-09-1998
			CA 2191156 A1	29-06-1997
			EP 0782285 A2	02-07-1997
			JP 9200148 A	31-07-1997
EP 0938205	A	25-08-1999	US 5943149 A	24-08-1999
			CA 2255346 A1	18-08-1999
			EP 0938205 A2	25-08-1999
			JP 11337765 A	10-12-1999
EP 1388963	A	11-02-2004	CN 1481105 A	10-03-2004
			EP 1388963 A2	11-02-2004
			JP 2004112763 A	08-04-2004
			US 2004033076 A1	19-02-2004